

Title (en)

An environment-friendly manganese brass alloy and manufacturing method thereof

Title (de)

Umweltfreundliche Mangan-Messing-Legierung sowie Verfahren zu deren Herstellung

Title (fr)

Alliage de laiton contenant du manganèse sans danger pour l'environnement et son procédé de fabrication

Publication

**EP 2374908 A1 20111012 (EN)**

Application

**EP 11156602 A 20110302**

Priority

CN 201010117783 A 20100302

Abstract (en)

The present invention provides an environment-friendly manganese brass alloy, which comprises 55# $\frac{1}{4}$ 65wt% of Cu, 1.0# $\frac{1}{4}$ 6.5wt% of Mn, 0.2# $\frac{1}{4}$ 3.0wt% of Al, 0# $\frac{1}{4}$ 3.0 wt% of Fe, 0.3# $\frac{1}{4}$ 2.0wt% of Sn, 0.01# $\frac{1}{4}$ 0.3wt% of Mg, 0# $\frac{1}{4}$ 0.3wt% of Bi and /or 0# $\frac{1}{4}$ 0.2wt% of Pb, the balance being Zn and unavoidable impurities. The alloys not only have superior mechanical properties, castability, cutability and corrosion resistance, especially stress corrosion resistance properties, but also have the advantages of low manufacturing costs and simple manufacturing process etc, which is suitable for making components through forging, casting, cutting and other manufacturing methods, especially suitable for making water tap bodies and valves through forging, casting and cutting processes.

IPC 8 full level

**C22C 9/04** (2006.01); **C22F 1/08** (2006.01)

CPC (source: EP US)

**C22C 9/04** (2013.01 - EP US); **C22F 1/08** (2013.01 - EP US)

Citation (search report)

- [A] JP H07310133 A 19951128 - CHUETSU METAL WORKS
- [A] US 5853505 A 19981229 - BRAUER DENNIS R [US], et al
- [A] JP 2000087158 A 20000328 - FURUKAWA ELECTRIC CO LTD

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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